Austin DuVall

Deb Moore

WRTG 1320

December 5, 2012

***Love Behind Glass Eyes: Sociable Robots and Us***

Picture this: a man is walking down the toy aisle at a local store and stops to look at a doll he plans to buy for his daughter’s birthday. It’s the most recent version and can even tell which foods are being put into its mouth, as well as talk, move, blink, and urinate. The man picks it up and places it in his cart, smiling as he does so because he knows that his daughter will love it. But had this particular scenario occurred around the mid-1800s, the reaction of the father would not have been so pleasant. Robots have been around for a long time, but have not always been accepted by society, especially western culture. As the twentieth century was just beginning, so was a change in the perception of robotics. They were no longer being viewed as a no-so-distant cousin of Frankenstein’s monster, but an increasingly normal addition to popular culture. But because of that new normality, has it effected the human population more than we realize? Through studies and experimentation, it has been found that sociable robots have an effect on human psychology and can have long-term effects depending on how long the relationship between the robot and human lasts. While some may not believe that sociable robots have either ill or positive effects, when looking at children, seniors, and more culturally relevant topics like social networking site, it is clear that there are effects, but the nature of those effects is unknown at this time.

With children, the effects of sociable robotics are much more prevalent and easy to observe. Over a period of five years, researchers, Sherry Turkle, Will Taggart, Cory D. Kidd, and Olivia Dasté, completed an experimental study over the effects of social robots called, “Relational artifacts with children and elders: the complexities of cybercompanionship.” Children were given either a My Real Baby, Aibos, or Paros doll to have in both their school and home life. During this study, Turkle and the researchers looked at what they called the “Rorschach effect (Turkle 347).” Much like the reflection test it’s named after, the Rorschach effect is “how relationships with robots express other things about a person’s life (Turkle 347).” For example, 10-year-old, Orelia, commented on her relationship with her mother by the way she interacted with the toy she was given (Turkle 350). Orelia’s mother is a “self-absorbed woman who during several sessions with her daughter and the robot does not touch, speak, or make eye contact with her daughter (Turkle 350). According to Orelia’s case study, she refuses to acknowledge that her toy has actual feelings and claims that she could never really love it as she does actual people (Turkle 351). Her brother, however, is more inclined to think that the toy does have feelings and often takes the toy’s feelings into consideration when interacting with it (Turkle 350). Orelia’s younger brother is also highly favored by their mother and receives more attention than she does (Turkle 350). Because Orelia does not get the amount of attention and affection that she desires from her mother, she shuns the notion that an inanimate object could give her just that. “Orelia wants the kind of love that only a living creature can provide. She fears the ability of any creature to behave ‘as if’ it could love. She denies a chilly emotional reality by attribution qualities of intuition, transparency and connectedness to all people and animals (Turkle 350-51).” While the situation was not the best for Orelia, interacting with the toy did help her come to terms with the emotional conflict she was suffering with because of her mother. This same principal is mirrored in other children that participated in the study as well. A large portion of the children showed signs of projection when interacting with the sociable robots because they lacked something in their real life and, by giving it to the toy, gained in their minds. In the discussion part of this study, Turkle argues against the notion that this behavior is positive. She claims that the relationships that the children are having with the toys are not “developmentally healthy.” While the robots do act as projection screen and comfort the child for a short time, they do not fix the problem entirely (Turkle 360). Therefore, the issue is put off and forces the child to deal with it at a later time. This could cause psychological problems in the future (Turkle 360).

In another study done with children, “Interactive Robots as Social Partners and Peer Tutors for Children: A Field Trial,” researchers, Takayuki Kanda, Takayuki Hirano, Daniel Eaton, and Hiroshi Ishiguro, look at a robot’s ability to be both sociable and educational. During an 18-day trial, first and sixth grade Japanese students interacted with a robot that interacted with them socially, as well as tutored them in English skills. At the end of the 18-days, the students were tested on the English that they had been learning from the robot. The studies showed that the more time a child had spent with the robot, the more English that they learned (Ishiguro 76). The predispositions of the students also played a role in the statistics. If a student had previously know a little English, they performed substantially better, with the help of the robot, than those who had no prior English knowledge (Ishiguro 77). There were no negative effects recorded in this research and Turkle does not make an argument against the benefits of educational sociable robots.

With senior citizens, the emotional and psychological effects of sociable robots are more deep set than those with children. In the same study done with children, Turkle and her colleagues present toys to seniors as well. Andy, a 76-year-old nursing home patient who’s battling depression is one of the individuals studied (Turkle 356). Andy feels alone and isolated from his family because of a recent divorce. He makes friends with birds, squirrels and neighborhood cats and believes that they communicate with him (Turkle 356). Andy was given a My Real Baby doll to interact with. During his time with the doll, Andy names the doll after his ex-wife and tells it things that he would tell his wife if given the chance (Turkle 356). Andy tells Turkle and her team that it feels good to talk to the doll and that he treats it like one of the family. Turkle does not support this type of behavior and believes it to be destructive. In her article, “Alone Together: The Robotic Movement,” Turkle explains that while the robot may make the senior feel as though they have regained a family member or other important relationship, they are still alone. Turkle knows that “in the moment of apparent connection between [the robot and the patient], a moment that comforted [him], the robot understood nothing. All the subject is doing is healing them by giving something else what they most need and while they feel connected, they are in fact alone (Turkle 327).

In light of society’s recent obsession with social networking, the topic of social robotics in the Internet is a very valid point to be made in this particular research. In Turkle’s article, “Alone Together: The Robotic Movement,” she makes the notion that we are constantly being “offered robots and a whole world of machine-mediated relationships on networked devices (Turkle 328).” “As we instant-message, e-mail, text, and Twitter, technology redraws the boundaries between intimacy and solitude (Turkle 328).” Turkle suggests that because “real things” happen in “real time,” the human population has turned to a quicker means of interaction and information sharing: the social network. “After an evening of avatar-to-avatar talk in a networked game, we feel…in possession of a full social life (Turkle 328).” Sociable robots and online life, according to Turkle, suggest the possibility that we are in charge of forming relationships in the manner that we want them. We can make a Facebook profile that makes us seem admirable (Turkle 329). We can create avatars that are more physically fit than we actually are and we can shorten messages down the bare essentials (Turkle 329). Turkle does not favor how popular social media has become and notes that “when we are not ‘at work,’ we experience ourselves as ‘on call’; pressed, we want to edit out complexity and ‘cut to the chase (Turkle 330).”

The effects of sociable robots are varied, but, as the research shows, most of them are negative. Social robots have been proven to help with therapeutic means and as educational tools, but they have also been linked to antisocial issues as well as latent psychological issues. The robots, while they may be comforting, put off things that a person should be dealing with, much like Andy and Orelia. If this pattern continues and becomes more accepted throughout the world of technology, the use of sociable robots could see a decline in future years. That’s not to say that that they’re all bad, but they do have very significant flaws that need immediate attention if they want to receive the respect and usage that they so desire and deserve.

Works Cited

Hiroshi Ishiguro, et al. "Interactive Robots As Social Partners And Peer Tutors For Children: A Field Trial." Human-Computer Interaction 19.1/2 (2004): 61-84. Academic Search Premier. Web. 11 Dec. 2012.

Sherry Turkle, et al. "Relational Artifacts With Children And Elders: The Complexities Of Cybercompanionship." Connection Science 18.4 (2006): 347-361. Academic Search Premier. Web. 10 Dec. 2012.

Turkle, Sherry. “Alone Together: The Robotic Movement,” *Alone Together: Why We Expect More from Technology and Less From Each Other.* New York: Basic Books, 2011. pp. 3-13. Print. Rpt. in *Writing in the Disciplines: A Reader and Rhetoric for Academic Writers*, 7th ed. Ed. Mary Lynch Kennedy and William J. Kennedy. Boston; Pearson 2012. 322-30. Print.